



## Food security and marine capture fisheries: Characteristics, trends, drivers and future perspectives

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**Author(s):** Garcia SM, Rosenberg AA  
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### Abstract:

World population is expected to grow from the present 6.8 billion people to about 9 billion by 2050. The growing need for nutritious and healthy food will increase the demand for fisheries products from marine sources, whose productivity is already highly stressed by excessive fishing pressure, growing organic pollution, toxic contamination, coastal degradation and climate change. Looking towards 2050, the question is how fisheries governance, and the national and international policy and legal frameworks within which it is nested, will ensure a sustainable harvest, maintain biodiversity and ecosystem functions, and adapt to climate change. This paper looks at global fisheries production, the state of resources, contribution to food security and governance. It describes the main changes affecting the sector, including geographical expansion, fishing capacity-building, natural variability, environmental degradation and climate change. It identifies drivers and future challenges, while suggesting how new science, policies and interventions could best address those challenges. © 2010 The Royal Society.

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### Resource Description

#### Communication: ☒

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

#### Communication Audience: ☒

audience to whom the resource is directed

Policymaker

#### Early Warning System: ☒

resource focus on systems used to warn populations of high temperatures, extreme weather, or other elements of climate change to prevent harm to health

A focus of content

#### Exposure : ☒

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weather or climate related pathway by which climate change affects health

Ecosystem Changes, Food/Water Security

**Food/Water Security:** Fisheries

**Geographic Feature:**

resource focuses on specific type of geography

Ocean/Coastal

**Geographic Location:**

resource focuses on specific location

Global or Unspecified

**Health Impact:**

specification of health effect or disease related to climate change exposure

Health Outcome Unspecified

**Intervention:**

strategy to prepare for or reduce the impact of climate change on health

A focus of content

**Mitigation/Adaptation:**

mitigation or adaptation strategy is a focus of resource

Adaptation

**Population of Concern:** A focus of content

**Population of Concern:**

populations at particular risk or vulnerability to climate change impacts

Low Socioeconomic Status, Workers

**Resource Type:**

format or standard characteristic of resource

Review

**Resilience:**

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

**Timescale:**

time period studied

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Time Scale Unspecified

## **Vulnerability/Impact Assessment:**

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content